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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/635,250 | 08/06/2003 | James C. Hunziker | 584-35278-US | 9426 |
| 24923 | 7590 | 04/29/2005 | | |
| PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130 | | | EXAMINER WHITTINGTON, KENNETH | |
| | | | ART UNIT 2862 | PAPER NUMBER |

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,250

Applicant(s)

HUNZIKER ET AL.

Examiner

Kenneth J Whittington

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2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-11, 13, 14 and 16-27 is/are rejected.
- 7) ☒ Claim(s) 12 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/4/05, 3/15/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "58" has been used to designate both the snap ring and the direct contact electrode. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 2, paragraph 3, line 4, "is" should be inserted between "that" and "higher".

Appropriate correction is required.

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Claim Objections

Claim 18 is objected to because of the following informalities: "the sensor component" lacks antecedent basis.

5 Amending this term to "the second electric component" would overcome this objection. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs
10 of 35 U.S.C. 102 that form the basis for the rejections under
this section made in this Office action:

A person shall be entitled to a patent unless -

15 (b) the invention was patented or described in a printed publication in this or
a foreign country or in public use or on sale in this country, more than one
year prior to the date of application for patent in the United States.

Claims 9-11, 17-23 and 27 are rejected under 35
U.S.C. 102(b) as being anticipated by Janes (US 4,651,100).

Regarding claims 9, 10 and 22, Janes discloses a sonde
20 comprising:

an outer housing (See Janes FIGS. 3 and 4, item 11);

an electrical device operably associated with the housing
(See col. 10, lines 44-47);

a side entry leak protector connector assembly retained
25 within the housing (See FIGS. 3 and 4, item 48/50) comprising: a

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generally cylindrical body with a pair of axial ends (note figures);

a conductive element retained within the body and interconnected with the electrical device and extending through at least one of said axial ends via a connecting pin (See FIGS. 3 and 4, item 72); and

sealing encasing said conductive element within the body to electrically isolate the conductive element (See FIGS. 3 and 4, ceramic terminal 50).

Regarding claims 11 and 23, Janes discloses a channel surrounding the body (See FIGS. 3 and 4, item 69).

Regarding claims 17-19 and 21, Janes discloses the features noted above and further discloses a second electric component disposed on the outer portion of the sonde and connected to the internal components through the leak protector assembly (See FIGS. 3 and 4, items 48, 50, 72 and antenna slot element 114 and see col. 10, lines 44-47).

Regarding claim 20, Janes discloses a channel surrounding the body (See FIGS. 3 and 4, item 69).

Regarding claim 27, Janes disclose an o-ring disposed on the outer surface of the body (See FIGS. 3 and 4, item 66).

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Claims 17-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al. (US 5,682,099). Regarding claims 17 and 21, Thompson et al. discloses a method of providing a wellbore tool comprising providing a sonde having an interior chamber within (See Thompson et al. FIGS. 2A-C, note upper and lower chambers); providing a first electronic component within the interior chamber (See FIG. 2B, items 75 or 73); associating a second electronic component, which is a sensor or transmitter, with an exterior of the sonde (See FIGS. 2A-2C, note antennas embedded in recesses 57, 61 or 65); and connecting the first and second electronic components through a side entry leak protector connector assembly (See FIGS. 2A-2C, note protector connector assembly 79).

Regarding claims 18 and 19, Thompson et al. discloses the step of establishing an electrical connection between the first and second electrical component and the side entry leak protector connector assembly (See FIGS. 2A-2C, note connections).

Claims 22-24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Sinclair (US 6,064,210). Regarding claim 22, Sinclair discloses a cartridge for insert into a housing comprising: a generally cylindrical body having two axial ends

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and a radial outer surface (See Sinclair FIGS. 5 and 5a, item 42); a conductive element that is electrically isolated and sealed within the body providing a first electrical interconnection at the radial outer surface and a second
5 electrical connection at an axial end (See col. 7, line 44 to col. 8, line 32, note discussion of electronics in circuit chamber 74 and channels 76 shown in FIGS. 5 and 5a).

Regarding claim 23, Sinclair discloses the body including a circumferential channel.

10 Regarding claim 24, Sinclair discloses the body further defining an axial passage through which additional wiring may be disposed (See col. 7, line 44 to col. 8, line 32, note discussion on electronics wherein other components and connections are inside chamber 74 and channels 76).

15 Regarding claim 26, Sinclair discloses a sensor disposed upon the radial outer surface of the body and in electrical connection with the first electrical interconnection (See FIG. 5 and 5a, note transmitter and receivers 66 and 68, and see col. 7, line 44 to col. 8, line 32 for electrical connections
20 thereto).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at
10 the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere* Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for
15 establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
- 20 3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

25 Claims 9, 10, 13, 14, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. in view of Chesnutt et al. (US 5,661,402).

Regarding claims 9, 22 and 25 Thompson et al. teaches a sonde comprising: an outer housing (See FIGS. 2A-2C, item 51);
30 an electrical device operably associated with the housing (See FIG. 2B, items 75 or 73); and

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a side entry leak protector connector assembly retained within the housing and comprising: a generally cylindrical body with a pair of axial ends, a conductive element retained within the body, interconnected with the electrical device and
5 extending through at least one of said axial ends (See FIGS. 2A-2C, note protector connector assembly 79).

However, while the conductors would have some sort of insulation thereon as is well known in the art, Thompson et al. does not explicitly teach encasing the conductors in a sealant.
10 Chesnutt et al. teach of encasing conductors in downhole assemblies in glass sealing material (See Chesnutt et al. col. 4, lines 21-33). It would have been obvious at the time the invention was made to incorporate the glass sealing material to insulate the conductors of Thompson et al. One having ordinary
15 skill in the art would have been motivated to do so to protect the wires from moisture or otherwise and degrade overtime (See same paragraph of Chesnutt et al.).

Regarding claim 10, the combination teaches a pin connector associated with the conductive element (See Thompson et al.
20 FIGS. 2A-2C, shown but not identified).

Regarding claim 13, the combination teaches a pair of housing chambers for housing electric components, an axial passage connecting the chambers, the leak protector assembly

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being retained in such passage (See Thompson et al. FIGS 2A-2C, note chambers for holding electric components 73 and 75, axial passage therebetween and item 77 or 79 therein).

Regarding claim 14, the combination teaches a lateral
5 passage through the housing (See Thompson et al. FIGS. 2A-2C, shown but not identified).

Regarding claim 24, the combination teaches the axial passage of the connector provides passage to multiple conductors (See Thompson et al. FIG. 2C, note multiple wires in passages).

10

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. in view of Chesnutt et al. as applied to claims 9 and 13 above, and further in view of Frey et al. (US 6,836,218). The noted combination teaches the features
15 of claims 9 and 13, however, it does not teach of the axial passage being eccentric. Frey et al. teaches an eccentric axial passage for a wellbore tool having a component sensor component therein (See FIG. 14, note run-in-tool 10 in sub 30). It would have been obvious at the time the invention was made to make the
20 connector fit eccentric in the housing. One having ordinary skill in the art would have been motivated to do so to provide room within the housing for passages of other materials and

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components as shown in FIG. 14 of Frey et al. (note the central bore for passing drill fluid).

Allowable Subject Matter

5 Claims 12 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10 The following is a statement of reasons for the indication of allowable subject matter: while the prior art shows several designs for collars inside a housing for electronics and the like, the prior art does not show o-rings surrounding the channel in the collar to prevent leakage of fluid from the channel as recited in claim 12 or a sensor disposed in the
15 channel of the collar as recited in claim 15.

Conclusion

20 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art listed in the PTO-892 not applied in the rejections noted above are cited to illustrate various collar designs for wellbore tools and various uses of o-rings in such tools.


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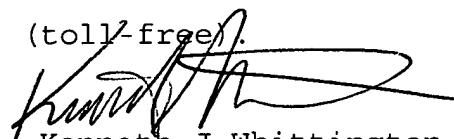
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-
5 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is
10 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status
15 information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JAY PATIDAR
PRIMARY EXAMINER


Kenneth J Whittington
Examiner
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kjw